CLAIMS:

We claim:

1. A method for the diagnosis of aspergillosis which comprises;

a. collecting the body fluid sample from a patient and separating the fluid from the cells,

b. incubating one or more of the peptides selected from the group consisting of sequences SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, and SEQ ID NO: 6 with the fluid obtained in the step a,

c. separating the residual unbound antibodies from the resultant incubation mixture in step b,

d. incubating the antibodies obtained in step c with the mixture of allergens/antigens of A. fumigatus coated on the polystyrene ELISA plates,

e. washing the excess antibodies from the ELISA plates with an appropriate buffer,

f. incubating the washed plates from stop a with anti-human IgG/IgE conjugated with an appropriate enzyme,

g. washing the excess conjugate from the ELISA plates with an appropriate buffer,

h. adding an appropriate soluble substrate for the

enzyme used in step f, and

i. reading the absorbance values of the wells of ELISA plates in an ELISA reader at an appropriate wavelength, wherein the acuteness of the disease is inversely related to the absorbance value.

2. The method as claimed in claim 1 wherein the body fluid is collected from blood, serum, cerbrospoinal fluid, pleural fluids and saliva.

3. The method as claimed in claim 1 wherein A. fumigatus allergens/ antigens are either obtained commercially or prepared by known methods.

4. The method as claimed in claim 1 wherein the buffer used is selected from Phosphate buffered saline or Tris buffered saline.

5. The method as claimed in claim 1 wherein the conjugate used is selected from anti-human IgG/IgE peroxidase or anti-human IgG/IgE alkaline I phosphatase.

6. The method as claimed in claim 1 wherein the substrate used is o-phenyldiamine or nitroblue tetrazolium (NBT).

7. The method as claimed in claim 1 wherein the *Aspergillus fumigatus* strains used for peptide synthesis have some characteristics ATCC strain AF-102; ATCC-42202.

8. The method as claimed in claim 1 wherein the peptide sequence of the antibody binding regions termed epitopes are identified through computer programmes.

9. The method as claimed in claim 1 wherein the peptides are synthesized by solid phase synthesis.

10. The method as claimed in claim 1 wherein the peptides are also useful for lymphoproliferation of lymphocytes isolated from the patients.

11. The method as claimed in claim 1 wherein the peptides are useful to raise antibodies against said peptides in animals.

12. The method as claimed in claim 1 wherein the peptides are also useful for immunotherapy and protection against Aspergillus fumigatus.

13. The method as claimed in claim 1 wherein the DNA sequences encoding the peptides are as defined in claim 1.

14. The method as claimed in claim 1 wherein the DNA or RNA probe is constructed on the basis of sequences of the peptides as defined in claim 1.

15. The method as claimed in claim 1 wherein a recombinant peptide is one of the peptides claimed in claim 1.

16. The method as claimed in claim 1 consisting of an immunodiagnostic kit using the peptides as claimed in claim 1 for diagnosis of aspergillosis.

17. The method as claimed in claim 1 further comprising developing a DNA based diagnostic kit using the DNA, cDNA or RNA sequences.

18. The method for using the peptide sequence of SEQ ID NO: 2 for the diagnosis of aspergillosis, which comprises;

a. collecting the blood sample from a patient and separating the serum from the blood,

b. incubating the patient serum with said peptides coated on the polystyrene ELISA plates,

c. washing the excess antibodies from the ELISA plates with an appropriate buffer,

d. incubating the washed plates from step c with anti-human IgG/IgE conjugated with an appropriate enzyme,

e. washing the excess conjugate from the ELISA plates with an appropriate buffer,

f. adding an appropriate soiuble substrate for the enzyme used ir step d, and

g. reading the absorbance values of the wells of ELISA plates in an ELISA reader at an appropriate wavelength, wherein the acuteness of the disease is directly related to the absorbance value.

19. The method as claimed in claim 18 wherein the body fluid is collected from blood, serum, cerbrospoinal fluid, pleural fluids or saliva.

20. The method as claimed in claim 18 wherein A. fumigates allergens/ antigens are either obtained commercially or prepared by known methods.

21. The method as claimed in claim 18 wherein the buffer used is selected from Phosphate buffered saline or Tris buffered saline.

22. The method as claimed in claim 18 wherein the conjugate used is selected from anti-human IgG/IgE peroxidase or anti-human IgG/IgE alkaline phosphatase.

23. The method as claimed in claim 18 wherein the substrate used is o-phenyldiamine or nitroblue tetrazolium (NBT).

24. The method as claimed in claim 18 wherein the Aspergillus fumigates strains used for peptide synthesis have some characteristics ATCC strain AF-102; ATCC-42202.

25. The method as claimed in claim 18 wherein the peptide sequence of the antibody binding regions termed epitopes are identified through computer programmes.

26. The method as claimed in claim 18 wherein the peptides are synthesized by solid phase synthesis.

27. The method as claimed in claim 18 wherein the peptides are also useful for lymphoproliferation of lymphocytes isolated from the patients.

28. The method as claimed in claim 18 wherein the peptides are useful to raise antibodies against said peptides in animals.

29. The method as claimed in claim 18 wherein the peptides are also useful for immunotherapy and protection against *Aspergillus fumigatus*.

30. The method as claimed in claim 18 wherein the DNA sequences encoding the peptides are as defined in claim 1.

31. The method as claimed in claim 18 wherein the DNA or RNA probe is constructed on the basis of sequences of the peptides as defined in claim 1.

32. The method as claimed in claim 18 wherein recombinant peptides are at least one of the peptides claimed in claim 1.

33. The method as claimed in claim 18 consisting of an immunodiagnostic kit using the peptides as claimed in claim 1 for diagnosis of aspergillosis.

34. The method as claimed in claim 18 further comprising developing a DNA based diagnostic kit using the DNA, cDNA or RNA sequences.